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Marked Copy of the Substitute Specification

Optical-controlled and Voice-Controlled Optical Fiber Skipping-rope

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BACKGROUND OF THE INVENTION

1 · Field of the Invention

The present invention is related to an optical-controlled and 10 voice-controlled optical fiber skipping-rope; in particular, there is equipped with a voice-controlled constructional body and an optical-controlled constructional body, respectively, on either of the two handles of the optical fiber skipping-rope, so that people can grasp the optical fiber skipping-rope and have the optical controlled having optical 15 and music control effect, that enables the broad application of the skipping-rope product, especially is use to act to be used at night.

2 · Description of the Prior Art

20 In a conventional General traditional skipping-rope structure, that the two handles is are usually made of plastic or wooden, and the connection part between the two handles is mainly made of fiber rope or soft plastic tube. Therefore, people feel dull when using this kind of skipping-rope. Besides, people may consider concern the security of using the 25 skipping-rope at night; especially, usually the players of skipping-rope are generally children who are careless about the security.

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SUMMARY OF THE INVENTION

An object of present invention is to provide an optical-controlled and voice-controlled optical fiber skipping-rope, it is the improved design for 5 the handle and rope of the skipping-rope, which is reflected by one handle with the music-controlling impressing construction body and another handle with the optical-controlling impressing construction body; at the same time, the handle of these two constructional body is bodies are connected by a luminescence constructional body[[],[]]. Another An object of the present 10 invention is to provided which the a skipping-rope product having provided with the optical-controllability, security and music-controllability and amusement.

BRIEF DESCRIPTION OF THE DRAWINGS

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The other objects and features of the present invention can be more fully understood by referring to the following description of preferred embodiments and accompanying drawings, in which:

- Fig.1 is a voice-controlled constructional body of the present invention;
- 20 Fig.2 is a sectional view of drawing according to Fig.1 of the present invention;
- Fig.3 is an optical-controlled constructional body of the present invention;
- Fig.4 is a sectional view of drawing according to Fig.3 of the present invention;
- 25 Fig.5 is an embodiment drawing of the present invention.

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DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention is related to an optical-controlled and voice-controlled optical fiber skipping-rope, referring to Fig.6 5, which 5 mainly including includes a voice-controlled constructional body 1, an optical-controlled constructional body 2 and a luminescence constructional body 3[;], wherein, referring Referring to Figs.1 and 2, the voice-controlled constructional body 1, including includes an upper cover 11 and an under cover 12, both having an forming oval shape.[, wherein, 10 the]] The upper cover 11 is equipped in its center with a press hole 111, the side face is equipped with multiple voice hole 112, the under cover 12 is equipped with anterior and posterior locking holes 121; while the connection part of upper cover 11 and under cover 12 is equipped with a button 15, an integrated circuit board 16, a fixing sleeve head 17, an 15 illuminant 18 and double cells 14.[; wherein, the]] A fixed seat 151 of button 15 is placed on the integrated circuit board 16; while the integrated circuit board 16 is equipped thereon with a buzzer 161 and a music chip 162, [[, besides the fixing]] Fixing foot 171 of the fixing sleeve head 17 is are placed on the integrated circuit board 16; while the fixing sleeve head 17 is 20 covering a covers the illuminant 18. [[; while the]] A neck 113 formed by the front end of the closing of upper cover 11 and under cover 12[[, is covering the]] covers a tapered sleeve head 13 connecting with the luminescence constructional body 3.

Referring to Figs. 3 and 4, the optical-controlled constructional body 25 2[[-,including]] includes an upper cover 21 and an under cover 22, both having an forming oval shape, wherein[[,]] the upper cover 21 is equipped in its center with a press hole 211, the under cover 22 is equipped with anterior

and posterior locking holes 221. [[; while the]] The connection part of upper cover 21 and under cover 22 is equipped with a button 25, an integrated circuit board 26, a fixing sleeve head 27, an illuminant 28 and double cells 24. [[, ~~wherein, the~~]] A fixed seat 251 of button 25 is placed on the 5 integrated circuit board 26; while the integrated circuit board 26 is equipped thereon with an optical-controlled chip 261. [[, ~~besides the fixing~~]] Fixing foot 271 of fixing sleeve head 27 are is placed on the integrated circuit board 26; while the fixing sleeve head 27 ~~is covering a~~ covers the illuminant 28. [[; while the]] A neck 212 formed by the front end of the closing of upper 10 cover 21 and lower cover 22[[, ~~is covering the~~]] covers a tapered sleeve head 23 connecting with the luminescence constructional body 3.

The present invention is related to an optical-controlled and voice-controlled optical fiber skipping-rope. [[, ~~referring~~]] Referring to Fig. 6 5, it mainly features a music handle, i.e., voice-controlled structure 1; 15 an optical-controlled handle, i.e., ~~the one formed by the connection of~~ the optical-controlled structure 2 and a luminescence constructional body 3. [[; when]] When pressing buttons 15 and 25, the optical-controlled and voice-controlled optical fiber skipping-rope of the present This invention may obtain following the features of the product that safety warning, and 20 amusement and esthetics.

What is claimed is:

1. An optical-controlled and voice-controlled optical fiber skipping-rope, including a voice-controlled constructional body and an optical-controlled
5 constructional body;

—Voice-controlled structure: consists of a upper under and a under cover ; while the upper cover is equipped in its center with a press hole, whose side face is equipped with multiple voice hole; besides, the under cover is
10 equipped with anterior and posterior locking holes, the connection part of its upper cover and lower cover is equipped with a button, an integrated circuit board, a fixing sleeve head, an illuminant and a double cell, wherein, the fixed seat of the button is placed on the integrated circuit board;

15 —Optical-controlled structure: consists of upper cover and under cover , wherein, the upper cover is equipped in its center with a press hole, the under cover is equipped with anterior and posterior locking holes; while the connection part of upper cover and under cover is equipped with a button, an integrated circuit board, a fixing sleeve head, an illuminant and a double
20 cell, wherein, the fixed seat of the button is placed on the integrated circuit board;

—luminescence constructional body

The product of this invention is formed by the mutual connection of the voice-controlled structure, optical-controlled structure & plastic optical
25 fiber structure, having the features of practicability, security, warning, aesthetics & amusement.

2. An optical-controlled and voice-controlled optical fiber skipping- rope to claim 1, wherein the integrated circuit board is equipped thereon with a buzzer and music chip to serve for music control.
- 5 3. An optical-controlled and voice-controlled optical fiber skipping- rope to claim 1, wherein the fixing foot of the fixing sleeve head of the voice-controlled structure is placed on the integrated circuit board; while the fixing sleeve head is also covering the illuminant.
- 10 4. An optical-controlled and voice-controlled optical fiber skipping- rope to claim 1, wherein the neck formed by the front end of the closing of upper cover and under cover of the voice-controlled structure is covering the tapered sleeve head and is connecting with the luminescence constructional body.
- 15 5. An optical-controlled and voice-controlled optical fiber skipping- rope to claim 1, wherein the integrated circuit board is equipped thereon with an optical-controlled chip to serve for optical fiber optical- control.
- 20 6. An optical-controlled and voice-controlled optical fiber skipping- rope to claim 1, wherein the fixing foot of the fixing sleeve head of the optical-controlled structure is placed on the integrated circuit board; while the fixing sleeve head is also covering the illuminant.
- 25 7. An optical-controlled and voice-controlled optical fiber skipping- rope to claim 1, wherein the neck formed by the front end of the closing of upper cover and lower cover of the optical-controlled structure is covering the

tapered sleeve head and is connecting with the luminescence constructional body.

8.An optical-controlled and voice-controlled optical fiber skipping- rope to
5 claim 1, wherein the luminescence constructional body that optical plastic
fiber and light-emitting diode and lamp and luminescence pharmaceutical
preparation constructional body.

9.An optical-controlled and voice-controlled optical fiber skipping- rope to
10 claim 1, wherein optical fiber skipping-rope has single-control and
double-control.

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ABSTRACT

The present invention related to an An optical-controlled and voice-controlled optical fiber skipping-rope[, which] mainly includes[:] 5 a voice-controlled constructional body, and an optical-controlled constructional body and a luminescence constructional body[[; these three structures]] The voice-controlled constructional body and the optical-controlled constructional body are connected by a the luminescence constructional body so as to form an optical-controlled and voice-controlled 10 optical fiber skipping-rope. Due to its lighting optical fiber control and amusing music control, it can jump be used at night and has the amusing effect at the same time, being really a product integrating practicability and security and amusement and aesthetics.

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